

FILE 2017/11

1.0 INTRODUCTION

This document is provided as background information to assist those persons involved in support of Task #14, "Target Recognition Training for Area Specialists." Specifically, information is provided to define the objectives and agenda of a meeting to be held 12 February with Sponsor personnel, the general purpose of which is to define training program content.

The overall objectives of the training program are defined in DK-400-1, pages 29 through 32. Further background information is given in DK-473, pages 16 through 47 and 57 through 65. Familiarity with both of these references is recommended for those persons involved in the 12 February meeting.

The objectives of the 12 February meeting are as follows:

- 1) To reach a decision on whether or not search training will be provided in addition to the planned target recognition training;
- 2) To develop a prioritized list of targets for which recognition training will be given; and
- 3) To discuss potential methods of training administration.

The meeting is intended as a working session and maximum interchange is desired.

2.0 SEARCH TRAINING

An analysis of Task #7 and #8 data indicated that individuals who performed well on search (hunting) tasks did not necessarily perform well on target recognition tasks; the reverse was also true. This, in turn, suggested that search and target recognition require different skills and thus different training.

Search training is designed to insure that the interpreter scans all of the image in the most efficient manner and does not overlook any potential targets. It differs from target recognition training in that emphasis is

placed on how and where to look for targets rather than the actual appearance of the targets. Other studies have shown that search training is of considerable effectiveness in improving speed or completeness of search.

During the discussions of 12 February, a decision must be reached as to whether or not search training will be provided. Further, if it is decided to provide search training, some agreement must be reached as to the relative emphasis to be placed on search vs. target recognition training.

3.0 TARGET SELECTION

As a necessary initial step in the development of target recognition training, agreement must be reached on the targets to be included in the training program. At the present time, two lists of 30 targets each have been developed by the Sponsor, both are based on the results of Task #8 performance data and consist entirely of targets included in Task #8 testing. In order to remain within program time and budget constraints, a list of 25-30 targets is needed; the current lists are too large. There has also been some discussion to the effect that not all targets of high interest (for purposes of training) were included in Task #8 testing; these should be considered in the development of a final target list. Finally, it may prove desirable to consider targets from Task #8 testing in addition to those now included in the two 30-item target lists.

The target selection process, then, will be applied to Task #8 targets and any additional targets suggested by Sponsor personnel. Targets will be selected by applying the selection criteria discussed in Section 3.1. After completion of the selection process, it will be necessary to prioritize the list in terms of training importance. The purpose of assigning each target a priority is to provide for the possibility of subsequent reductions in the number of targets for which training is provided. Such reductions may be necessary depending on the amount of search training provided.

3.1 Target Selection Criteria

The following criteria will be used to select a prioritized list of 25 to 30 targets:

- 1) Target Frequency - Targets selected should occur with sufficient frequency so that they are important in terms of overall Sponsor performance, and sufficient image examples exist to provide adequate training.
- 2) Target Importance - Targets should be important in the sense that misidentifying or not finding the target is considered to be a serious problem.
- 3) Task #8 Performance - Selected targets which were tested in Task #8 should show low performance — those showing high performance are much less likely to benefit from training.
- 4) Non-Duplication of Offutt Training - One objective of the training program is to avoid duplication of Offutt training — selected targets should be those which are not adequately covered at Offutt (as demonstrated by Task #8 data).
- 5) Error Type - A number of the errors which occurred on Task #8 testing appeared to be the result of scoring problems and/or failure to report targets in accordance with desired procedures and terminology. It was decided to not provide training relating to such verbal errors but rather to concentrate on errors clearly due to not recognizing or misidentifying targets. Accordingly, selected targets should not be those where errors are due to scoring or administrative reporting procedures.
- 6) Training Cohesiveness - For some targets, errors are primarily due to confusion with another target. In such cases, it is desirable to provide training on both the target which is misidentified and the target with which it is confused. Further, from the standpoint of training efficiency and effectiveness, it is desirable to train on logical groupings of targets. For

these reasons, selection of a particular target from the Task #8 list may imply the need to provide training on one or more related targets. These related targets must be identified as part of the target selection process.

The major objective of these criteria is to insure that the prototype training program has the greatest possible impact on improvement of overall performance. At the same time, the program must be developed in a manner such that it can be adequately evaluated and shown to be worth (in terms of performance) its cost of preparation.

3.2 Status of Current Target Lists

The two lists of targets developed by the Sponsor are recorded in DK-473, pages 46 and 47. These lists have been reviewed in terms of selection criteria (3), (4), and (5); results are shown in Table I. The assumption is made that those targets which showed high correlation with Offutt attendance (person attending Offutt did well on the items) are being adequately covered in Offutt training.

4.0 TRAINING METHODS

Having established a target list and reached a decision as to whether or not search training will be provided, the final portion of the meeting will be devoted to a discussion of training methods. Table II outlines some of the potential methods and techniques which might be used; the purpose of the discussion is to elicit Sponsor comments on past experience with any of these methods and techniques.

5.0 MEETING AGENDA

A proposed meeting agenda is shown in Table III. As indicated previously, the meeting is considered to be a working session. To this end, a review of Task #8 response data and imagery will be carried out as part of the session.

TABLE I: EVALUATION OF CURRENT TARGET LIST

TARGET NO.	(3) > 50% GENERALIST SCORE	(4) HIGH CORRELATION WITH OFFUTT ATTENDANCE	(5) PROBABLE SCORING OR VERBAL-TYPE ERRORS
8	x		
261	x	x	
410	x		
97			
272			
267			
268	x		
51	x		x
413	x		
415	x		
376	x		
202	x		
54	x	x	
182		x	
80			
181	x		
210			
382			
85	x		
169	x	x	
316			
147			
106			
384			
286			
9		x	
189			
31			x
177			

TABLE I: EVALUATION OF CURRENT TARGET LIST (Continued)

TARGET NO.	(3) 50% GENERALIST SCORE	(4) HIGH CORRELATION WITH OFFUTT ATTENDANCE	(5) PROBABLE SCORING OR VERBAL-TYPE ERRORS
216			
397	x	x	
196			
263	x	x	
259	x		
398			
197		x	
226	x	x	
300	x	x	
260	x	x	
195	x		
414		x	
54	x	x	
123	x		
400	x		x
187	x		x
51	x		x
299			
180	x		
134	x		
71			x
116			
120			x
57	x		x
72	x		x
87	x		x
76	x		x
270			
40			
278			
71			

TABLE II: TRAINING PROGRAM DECISION ALTERNATIVES

DECISION	ALTERNATIVE
Training Type	Search vs. Recognition Part vs. Whole Task
Training Approach - Search	Search Strategy Error Avoidance Training Visual Field Expansion Speeded Training Search Aids
Training Approach - Recognition	Minimum Image Target Abstractions Target Drawings Models Error Key Self-Concept Formation
Training Media	Lecture/Discussion Practical Exercise Slide/Tape or Movie Programmed Text
Training Methods	Individual vs. Group Adaptive vs. Non-adaptive Feed Back & Reinforcement

TABLE III: PROPOSED DISCUSSION AGENDA

SUBJECT	SUGGESTED TIME
I Review of Program Objective	15 min.
II Review of Tasks #7 and #8 Data	30 min.
III Discussion of Search Training	1 Hr.
IV Development of Preliminary Target List	1 Hr.
A. Review of Current List	
B. New Additions	
C. Criteria Statement	
V Review of Preliminary Target List	3 Hrs.
A. Image Review	
B. Response Review	
C. Criteria Review	
D. Final List Selection	
E. Prioritization of List	
VI Training Methods Discussion	2 Hrs.
A. Potential Methods	
B. Cost/Benefit Trades	
C. Preliminary Methods Listing	